- 14. The film of claim 1 wherein said transparent polymeric material is polyurethane.
- 15. The film of claim 1 wherein said transparent polymeric material has a high refractive index.
- 16. The film of claim 1 wherein said transparent polymeric material has a refractive index greater than or equal to 1.493.
- 17. The film of claim 1 wherein said transparent polymeric material has a refractive index greater than or equal to 1.586.
- 18. The film of claim 1, 4, 5, or 14 wherein said transparent polymeric material is isotropic.
- 19. The film of claim 1, 4, 5, or 14 wherein said transparent polymeric material is homogeneous.
- 20. The film of claim 1 wherein the film diffuses light.
- 21. The film of claim 1 wherein the film comprises an optical modification to permit controlled light leakage.
- 22. The film of claim 21 wherein the optical modification comprises diffusing particles.
- 23. The film of claim 21 wherein the optical modification comprises a window.
- 24. The film of claim 21 wherein the optical modification comprises said prisms having non-optically sharp corners.
- 25. The film of claim 21 wherein the optical modification comprises said prisms having non-optically smooth perpendicular sides.

- 26. The film of claim 21 wherein the optical modification comprises rounding said peaks of the structured surface, said rounding defined in accordance with the ratio r/.rho., where r is the approximate radius of the round peaks and .rho. is the groove period.
- 27. The film of claim 1 wherein the film comprises a composite structure in which the prisms are bonded to a separate sheet material.
- 28. The film of claim 1 wherein the film has about 70 prisms per inch so that when said film is curled said smooth surface lies in a smooth continuous arcuate curve without any discernible discontinuities.
- 29. The film of claim 1 wherein the film is self-supporting.
- 30. The film of claim 1 in combination with a light source arranged to direct incident light upon one of the structured or smooth surfaces of the film such that the light within certain angular ranges is totally internally reflected upon striking the other of the structured or smooth surfaces.
- 31. The light conduit of claim 9 wherein said transparent polymeric material is polyurethane.
- 32. The light conduit of claim 9 wherein said transparent polymeric material is acrylic.
- 33. The light conduit of claim 9 wherein said transparent polymeric material is polycarbonate.
- 34. The light conduit of claim 9 wherein said transparent polymeric material has a high refractive index.

- 35. The light conduit of claim 9 wherein said transparent polymeric material has a refractive index greater than or equal to 1.493.
- 36. The light conduit of claim 9 wherein said transparent polymeric material has a refractive index greater than or equal to 1.586.
- 37. The light conduit of claim 9, 31, 32, or 33 wherein said transparent polymeric material is isotropic.
- 38. The light conduit of claim 9, 31, 32, or 33 wherein said transparent polymeric material is homogeneous.
- 39. The light conduit of claim 9 wherein the conduit diffuses light.
- 40. The light conduit of claim 9 wherein the light conduit comprises an optical modification to permit controlled light leakage.
- 41. The light conduit of claim 40 wherein the optical modification comprises diffusing particles.
- 42. The light conduit of claim 40 wherein the optical modification comprises a window.
- 43. The light conduit of claim 40 wherein the film comprises a composite structure in which the prisms are bonded to a separate sheet material.
- 44. The light conduit of claim 9 wherein the film has at least 40 prisms per inch so that when said film is curled said smooth surface lies in a smooth continuous arcuate curve without any discernible discontinuities.

- 45. The light conduit of claim 9 wherein the film has about 70 prisms per inch so that when said film is curled said smooth surface lies in a smooth continuous arcuate curve without any discernible discontinuities.
- 46. The light conduit of claim 9 wherein the film is self-supporting.
- 47. The film of claim 13 wherein said transparent polymeric material is polyurethane.
- 48. The film of claim 13 wherein said transparent polymeric material is acrylic.
- 49. The film of claim 13 wherein said transparent polymeric material is polycarbonate.
- 50. The film of claim 13 wherein said transparent polymeric material has a high refractive index.
- 51. The film of claim 13 wherein said transparent polymeric material has a refractive index greater than or equal to 1.493.
- 52. The film of claim 13 wherein said transparent polymeric material has a refractive index greater than or equal to 1.586.
- 53. The film of claim 13, 47, 48, or 49 wherein said transparent polymeric material is isotropic.
- 54. The film of claim 13, 47, 48, or 49 wherein said transparent polymeric material is homogeneous.
- 55. The film of claim 13 wherein the film comprises a composite structure in which the prisms are honded to a separate sheet material.

- 56. The film of claim 13 wherein the film has at least 40 prisms per inch so that when said film is curled said smooth surface lies in a smooth continuous arcuate curve without any discernible discontinuities.
- 57. The film of claim 13 wherein the film has about 70 prisms per inch so that when said film is curled said smooth surface lies in a smooth continuous arcuate curve without any discernible discontinuities.
- 58. The film of claim 13 wherein the film is self-supporting.